X-14934.ST25.txt SEQUENCE LISTING

SEQUENCE EISTING												
<110>	Burris, Thomas P.											
<120>	Method of Treating Atherosclerosis and Hypercholesterolemia											
<130>	x-14934											
<160>	10					·						
<170>	Pate	entIn versio	on 3.3		•							
<210> <211> <212> <213>	1> 1528 2> DNA											
<400> cagtgco	1 cttg	gtaatgacca	gggctccaga	aagagatgtc	cttgtggctg	ggggcccctg	60					
				agctgtggaa			120					
				tcctcagaga			180					
ctgctg	9999	tactgcaggg	gtggggctgg	aggctgcaga	gcccacagcc	ctgctcacca	240					
gggcaga	agcc	cccttcagaa	cccacagaga	tccgtccaca	aaagcggaaa	aaggggccag	300					
ccccaa	aaat	gctggggaac	gagctatgca	gcgtgtgtgg	ggacaaggcc	tcgggcttcc	360					
actacaa	atgt	tctgagctgc	gagggctgca	agggattctt	ccgccgcagc	gtcatcaagg	420					
gagcgca	acta	catctgccac	agtggcggcc	actgccccat	ggacacctac	atgcgtcgca	480					
agtgcca	agga	gtgtcggctt	cgcaaatgcc	gtcaggctgg	catgcgggag	gagtgtgtcc	540					
tgtcaga	aaga	acagatccgc	ctgaagaaac	tgaagcggca	agaggaggaa	caggctcatg	600					
ccacato	cctt	gcccccagg	cgttcctcac	cccccaaat	cctgccccag	ctcagcccgg	660					
aacaact	tggg	catgatcgag	aagctcgtcg	ctgcccagca	acagtgtaac	cggcgctcct	720					
tttctga	accg	gcttcgagtc	acgccttggc	ccatggcacc	agatccccat	agccgggagg	780					
cccgtca	agca	gcgctttgcc	cacttcactg	agctggccat	cgtctctgtg	caggagatag	840					
ttgacti	ttgc	taaacagcta	cccggcttcc	tgcagctcag	ccgggaggac	cagattgccc	900					
tgctgaa	agac	ctctgcgatc	gaggtgatgc	ttctggagac	atctcggagg	tacaaccctg	960					
ggagtga	agag	tatcaccttc	ctcaaggatt	tcagttataa	ccgggaagac	tttgccaaag	1020					
cagggct	tgca	agtggaattc	atcaacccca	tcttcgagtt	ctccagggcc	atgaatgagc	1080					
tgcaact	tcaa	tgatgccgag	tttgccttgc	tcattgctat	cagcatcttc	tctgcagacc	1140					
ggcccaa	acgt	gcaggaccag	ctccaggtgg	agaggctgca	gcacacatat	gtggaagccc	1200					
tgcatgo	ccta	cgtctccatc	caccatcccc	atgaccgact	gatgttccca	cggatgctaa	1260					
tgaaact	tggt	gagcctccgg	accctgagca	gcgtccactc	agagcaagtg	tttgcactgc	1320					
gtctgca	agga	caaaaagctc	ccaccgctgc	tctctgagat	ctgggatgtg	cacgaatgac	1380					

X-14934.ST25.txt
tgttctgtcc ccatatttc tgtttcttg gccggatggc tgaggcctgg tggctgcctc 1440
ctagaagtgg aacagactga gaagggcaaa cattcctggg agctgggcaa ggagatcctc 1500
ccgtggcatt aaaagagagt caaagggt 1528

<210> 2

<211> 447 <212> PRT

<213> homo sapiens

<400> 2

Met Ser Leu Trp Leu Gly Ala Pro Val Pro Asp Ile Pro Pro Asp Ser $1 \hspace{1cm} 10 \hspace{1cm} 15$

Ala Val Glu Leu Trp Lys Pro Gly Ala Gln Asp Ala Ser Ser Gln Ala 20 25 30

Gln Gly Gly Ser Ser Cys Ile Leu Arg Glu Glu Ala Arg Met Pro His 35 40 45

Ser Ala Gly Gly Thr Ala Gly Val Gly Leu Glu Ala Ala Glu Pro Thr 50 60

Ala Leu Leu Thr Arg Ala Glu Pro Pro Ser Glu Pro Thr Glu Ile Arg 65 70 75 80

Pro Gln Lys Arg Lys Lys Gly Pro Ala Pro Lys Met Leu Gly Asn Glu 85 90 95

Leu Cys Ser Val Cys Gly Asp Lys Ala Ser Gly Phe His Tyr Asn Val 100 105 110

Leu Ser Cys Glu Gly Cys Lys Gly Phe Phe Arg Arg Ser Val Ile Lys 115 120 125

Gly Ala His Tyr Ile Cys His Ser Gly Gly His Cys Pro Met Asp Thr 130 135 140

Tyr Met Arg Arg Lys Cys Gln Glu Cys Arg Leu Arg Lys Cys Arg Gln 145 150 155 160

Ala Gly Met Arg Glu Glu Cys Val Leu Ser Glu Glu Gln Ile Arg Leu 165 170 175

Lys Lys Leu Lys Arg Gln Glu Glu Gln Ala His Ala Thr Ser Leu 180 185 190

Pro Pro Arg Arg Ser Ser Pro Pro Gln Ile Leu Pro Gln Leu Ser Pro 195 200 205

Page 2

Glu Gln Leu Gly Met Ile Glu Lys Leu Val Ala Ala Gln Gln Gln Cys 210 220 Asn Arg Arg Ser Phe Ser Asp Arg Leu Arg Val Thr Pro Trp Pro Met 225 230 235 240 Ala Pro Asp Pro His Ser Arg Glu Ala Arg Gln Gln Arg Phe Ala His 245 250 255 Phe Thr Glu Leu Ala Ile Val Ser Val Gln Glu Ile Val Asp Phe Ala 260 265 270 Lys Gln Leu Pro Gly Phe Leu Gln Leu Ser Arg Glu Asp Gln Ile Ala 275 280 285 Leu Leu Lys Thr Ser Ala Ile Glu Val Met Leu Leu Glu Thr Ser Arg 290 295 300 Arg Tyr Asn Pro Gly Ser Glu Ser Ile Thr Phe Leu Lys Asp Phe Ser 305 310 315 320 Tyr Asn Arg Glu Asp Phe Ala Lys Ala Gly Leu Gln Val Glu Phe Ile 325 330 335 Asn Pro Ile Phe Glu Phe Ser Arg Ala Met Asn Glu Leu Gln Leu Asn 340 345 350Asp Ala Glu Phe Ala Leu Leu le Ala Ile Ser Ile Phe Ser Ala Asp 355 360 365 Arg Pro Asn Val Gln Asp Gln Leu Gln Val Glu Arg Leu Gln His Thr 370 375 380 Tyr Val Glu Ala Leu His Ala Tyr Val Ser Ile His His Pro His Asp 385 390 395 400 Arg Leu Met Phe Pro Arg Met Leu Met Lys Leu Val Ser Leu Arg Thr 405 410 415 Leu Ser Ser Val His Ser Glu Gln Val Phe Ala Leu Arg Leu Gln Asp 420 425 430 Lys Lys Leu Pro Pro Leu Leu Ser Glu Ile Trp Asp Val His Glu 435 440 445

<210> 3 <211> 2010

<212> DNA <213> homo sapiens

<400> 3						
	cgaagttacc	tttgagggta	tttgagtagc	ggcggtgtgt	caggggctaa	60
agaggaggac	gaagaaaagc	agagcaaggg	aacccagggc	aacaggagta	gttcactccg	120
cgagaggccg	tccacgagac	cccgcgcgc	aggcatgagc	cccgccccc	acgcatgagc	180
cccgccccc	gctgttgctt	ggagaggggc	gggacctgga	gagaggctgc	tccgtgaccc	240
caccatgtcc	tctcctacca	cgagttccct	ggataccccc	ctgcctggaa	atggcccccc	300
tcagcctggc	gccccttctt	cttcacccac	tgtaaaggag	gagggtccgg	agccgtggcc	360
cgggggtccg	gaccctgatg	tcccaggcac	tgatgaggcc	agctcagcct	gcagcacaga	420
ctgggtcatc	ccagatcccg	aagaggaacc	agagcgcaag	cgaaagaagg	gcccagcccc	480
gaagatgctg	ggccacgagc	tttgccgtgt	ctgtggggac	aaggcctccg	gcttccacta	540
caacgtgctc	agctgcgaag	gctgcaaggg	cttcttccgg	cgcagtgtgg	tccgtggtgg	600
ggccaggcgc	tatgcctgcc	ggggtggcgg	aacctgccag	atggacgctt	tcatgcggcg	660
caagtgccag	cagtgccggc	tgcgcaagtg	caaggaggca	gggatgaggg	agcagtgcgt	720
cctttctgaa	gaacagatcc	ggaagaagaa	gattcggaaa	cagcagcagc	aggagtcaca	780
gtcacagtcg	cagtcacctg	tggggccgca	gggcagcagc	agctcagcct	ctgggcctgg	840
ggcttcccct	ggtggatctg	aggcaggcag	ccagggctcc	ggggaaggcg	agggtgtcca	900
gctaacagcg	gctcaagaac	taatgatcca	gcagttggtg	gcggcccaac	tgcagtgcaa	960
caaacgctcc	ttctccgacc	agcccaaagt	cacgccctgg	cccctgggcg	cagaccccca	1020
gtcccgagat	gcccgccagc	aacgctttgc	ccacttcacg	gagctggcca	tcatctcagt	1080
ccaggagatc	gtggacttcg	ctaagcaagt	gcctggtttc	ctgcagctgg	gccgggagga	1140
ccagatcgcc	ctcctgaagg	catccactat	cgagatcatg	ctgctagaga	cagccaggcg	1200
ctacaaccac	gagacagagt	gtatcacctt	cttgaaggac	ttcacctaca	gcaaggacga	1260
cttccaccgt	gcaggcctgc	aggtggagtt	catcaacccc	atcttcgagt	tctcgcgggc	1320
catgcggcgg	ctgggcctgg	acgacgctga	gtacgccctg	ctcatcgcca	tcaacatctt	1380
ctcggccgac	cggcccaacg	tgcaggagcc	gggccgcgtg	gaggcgttgc	agcagcccta	1440
cgtggaggcg	ctgctgtcct	acacgcgcat	caagaggccg	caggaccagc	tgcgcttccc	1500
gcgcatgctc	atgaagctgg	tgagcctgcg	cacgctgagc	tctgtgcact	cggagcaggt	1560
cttcgccttg	cggctccagg	acaagaagct	gccgcctctg	ctgtcggaga	tctgggacgt	1620
ccacgagtga	ggggctggcc	acccagcccc	acagccttgc	ctgaccaccc	tccagcagat	1680
agacgccggc	accccttcct	cttcctaggg	tggaaggggc	cctgggcgag	cctgtagacc	1740
tatcggctct	catcccttgg	gataagcccc	agtccaggtc	caggaggctc	cctccctgcc	1800

X-14934.ST25.txt cagcgagtct tccagaaggg gtgaaagggt tgcaggtccc gaccactgac ccttcccggc									
tgccctccct ccccagctta cacctcaagc ccagcacgca gcgtaccttg aacagaggga									
ggggaggacc catggctctc ccccctagc ccgggagacc aggggccttc ctcttcctct									
gcttttattt aataaaaata aaaacagaaa									
3									
<210> 4 <211> 461 <212> PRT <213> homo sapiens									
<400> 4									
Met Ser Ser Pro Thr Thr Ser Ser Leu Asp Thr Pro Leu Pro Gly Asn 1 10 15									
Gly Pro Pro Gln Pro Gly Ala Pro Ser Ser Ser Pro Thr Val Lys Glu 20 25 30									
Glu Gly Pro Glu Pro Trp Pro Gly Gly Pro Asp Pro Asp Val Pro Gly 35									
Thr Asp Glu Ala Ser Ser Ala Cys Ser Thr Asp Trp Val Ile Pro Asp 50 60									
Pro Glu Glu Pro Glu Arg Lys Arg Lys Gly Pro Ala Pro Lys 65 70 75 80									
Met Leu Gly His Glu Leu Cys Arg Val Cys Gly Asp Lys Ala Ser Gly 85 90 95									
Phe His Tyr Asn Val Leu Ser Cys Glu Gly Cys Lys Gly Phe Phe Arg 100 105 110									
Arg Ser Val Val Arg Gly Gly Ala Arg Arg Tyr Ala Cys Arg Gly Gly 115 120 125									
Gly Thr Cys Gln Met Asp Ala Phe Met Arg Arg Lys Cys Gln Gln Cys 130 140									
Arg Leu Arg Lys Cys Lys Glu Ala Gly Met Arg Glu Gln Cys Val Leu 145 150 150									
Ser Glu Glu Gln Ile Arg Lys Lys Ile Arg Lys Gln Gln Gln 165 170 175									

Glu Ser Gln Ser Gln Ser Pro Val Gly Pro Gln Gly Ser Ser 180 185 190

X-14934.ST25.txt
Ser Ser Ala Ser Gly Pro Gly Ala Ser Pro Gly Gly Ser Glu Ala Gly
195 200 205 Ser Gln Gly Ser Gly Glu Gly Glu Gly Val Gln Leu Thr Ala Ala Gln 210 215 220 Glu Leu Met Ile Gln Gln Leu Val Ala Ala Gln Leu Gln Cys Asn Lys 235 230 240 Arg Ser Phe Ser Asp Gln Pro Lys Val Thr Pro Trp Pro Leu Gly Ala 245 250 255 Asp Pro Gln Ser Arg Asp Ala Arg Gln Gln Arg Phe Ala His Phe Thr 260 265 270 Glu Leu Ala Ile Ile Ser Val Gln Glu Ile Val Asp Phe Ala Lys Gln 275 280 285 Val Pro Gly Phe Leu Gln Leu Gly Arg Glu Asp Gln Ile Ala Leu Leu 290 295 300 Lys Ala Ser Thr Ile Glu Ile Met Leu Leu Glu Thr Ala Arg Arg Tyr 305 310 315 320 Asn His Glu Thr Glu Cys Ile Thr Phe Leu Lys Asp Phe Thr Tyr Ser 325 330 335Lys Asp Asp Phe His Arg Ala Gly Leu Gln Val Glu Phe Ile Asn Pro 340 345 350 Ile Phe Glu Phe Ser Arg Ala Met Arg Arg Leu Gly Leu Asp Asp Ala 355 360 365 Glu Tyr Ala Leu Leu Ile Ala Ile Asn Ile Phe Ser Ala Asp Arg Pro 370 380 Asn Val Gln Glu Pro Gly Arg Val Glu Ala Leu Gln Gln Pro Tyr Val 385 390 395 400 Glu Ala Leu Leu Ser Tyr Thr Arg Ile Lys Arg Pro Gln Asp Gln Leu 405 410 415 Arg Phe Pro Arg Met Leu Met Lys Leu Val Ser Leu Arg Thr Leu Ser 420 425 430 Ser Val His Ser Glu Gln Val Phe Ala Leu Arg Leu Gln Asp Lys Lys 435

Leu Pro Pro Leu Leu Ser Glu Ile Trp Asp Val His Glu 450 455 460

<210> 5 <211> 5449 <212> DNA <213> home	9 o sapiens					
<400> 5 gcgccggggg	ccgccgcgcc	cgccgcccgc	tgcctgcgcc	gccggccggg	catgagttag	60
tcgcagacat	ggacaccaaa	catttcctgc	cgctcgattt	ctccacccag	gtgaactcct	120
ccctcacctc	cccgacgggg	cgaggctcca	tggctgcccc	ctcgctgcac	ccgtccctgg	180
ggcctggcat	cggctccccg	ggacagctgc	attctcccat	cagcaccctg	agctccccca	240
tcaacggcat	gggcccgcct	ttctcggtca	tcagctcccc	catgggcccc	cactccatgt	300
cggtgcccac	cacacccacc	ctgggcttca	gcactggcag	ccccagctc	agctcaccta	360
tgaaccccgt	cagcagcagc	gaggacatca	agcccccct	gggcctcaat	ggcgtcctca	420
aggtccccgc	ccacccctca	ggaaacatgg	cttccttcac	caagcacatc	tgcgccatct	480
gcggggaccg	ctcctcaggc	aagcactatg	gagtgtacag	ctgcgagggg	tgcaagggct	540
tcttcaagcg	gacggtgcgc	aaggacctga	cctacacctg	ccgcgacaac	aaggactgcc	600
tgattgacaa	gcggcagcgg	aaccggtgcc	agtactgccg	ctaccagaag	tgcctggcca	660
tgggcatgaa	gcgggaagcc	gtgcaggagg	agcggcagcg	tggcaaggac	cggaacgaga	720
atgaggtgga	gtcgaccagc	agcgccaacg	aggacatgcc	ggtggagagg	atcctggagg	780
ctgagctggc	cgtggagccc	aagaccgaga	cctacgtgga	ggcaaacatg	gggctgaacc	840
ccagctcgcc	gaacgaccct	gtcaccaaca	tttgccaagc	agccgacaaa	cagcttttca	900
ccctggtgga	gtgggccaag	cggatcccac	acttctcaga	gctgcccctg	gacgaccagg	960
tcatcctgct	gcgggcaggc	tggaatgagc	tgctcatcgc	ctccttctcc	caccgctcca	1020
tcgccgtgaa	ggacgggatc	ctcctggcca	ccgggctgca	cgtccaccgg	aacagcgccc	1080
acagcgcagg	ggtgggcgcc	atctttgaca	gggtgctgac	ggagcttgtg	tccaagatgc	1140
gggacatgca	gatggacaag	acggagctgg	gctgcctgcg	cgccatcgtc	ctctttaacc	1200
ctgactccaa	ggggctctcg	aacccggccg	aggtggaggc	gctgagggag	aaggtctatg	1260
cgtccttgga	ggcctactgc	aagcacaagt	acccagagca	gccgggaagg	ttcgctaagc	1320
tcttgctccg	cctgccggct	ctgcgctcca	tcgggctcaa	atgcctggaa	catctcttct	1380
tcttcaagct	catcggggac	acacccattg	acaccttcct	tatggagatg	ctggaggcgc	1440
cgcaccaaat	gacttaggcc	tgcgggccca	tcctttgtgc	ccacccgttc	tggccaccct	1500
gcctggacgc	cagctgttct	tctcagcctg	agccctgtcc	ctgcccttct	ctgcctggcc	1560
tgtttggact	ttggggcaca	gcctgtcact	gctctgccta	agagatgtgt	tgtcaccctc	1620

X-14934.ST25.txt cttatttctg ttactacttg tctgtggccc agggcagtgg ctttcctgag gcagcagcct 1680 1740 tcgtggcaag aactagcgtg agcccagcca ggcgcctccc caccgggctc tcaggacacc 1800 ctgccacacc ccacggggct tgggcgacta cagggtcttc gggccccagc cctggagctg 1860 caggagttgg gaacggggct tttgtttccg ttgctgttta tcgatgctgg ttttcagaat 1920 tcctgtgtgg ccctcctgtc tggagtgaca tcttcatctg ctctgaatac tggtgcccag 1980 ccagcccgtg acagcttccc cctaatcagg aggggacagc tgggggcgca agctggtgtg 2040 tcatcagcaa agacctcagc cgcctcgggg atgagagggg actcgtgggg caagcaagct gccctgtgct ctgagtgagg gggaaggtag cccctttttc caaagataac tcacagtttt 2100 2160 gccctcgagc caatgagaac atgagctgcc ctctgtgcaa ggtttcgggg ccacctccag 2220 gctgcagggg cgggtcactc accccctgt tttctctctg ccttggtgtt ctggtttcag 2280 actcccgact ccccgttcag accagagtgc cccggcccct ccccagcctg agtcttctcc 2340 ttgctctgcg gggtgggctg aggcttgtcc ttgtttcctg cagggctggc cctggctcgg 2400 gcagggtggg gcatcaccac ctcactggcc ttgctggagg cacagggctc tgcggacctg 2460 cagccatctg tgaggcccgc ggggatggga ggggaggagg gtggcctgtt ggtttccctc 2520 agagggggca ggtggcctgg agagagaggg gctcaggaac tgggagcctc gtgggtgggg 2580 cagatgctcc gcggcctgga gtggctctgc cggggcattg gtgggacccc tgctcaggcc 2640 ttctctctgg ctgccagttg tgtctaaaag actcttggaa tctgagaacc cggagtcgca gcgccctcgg gcctgggcca cacgcaggcc ctggtgggac cacccagcct ggtattgtcc 2700 2760 acggacagcg ttgttcaccc agagccttac ttgggagcct cactgaacgc ctgctctggt 2820 tgaaggtggg gtgggggcgg ggcttggggc ctccctggct cagcccagtg cggcctggcg 2880 ctcctcccgc aggctctgcc cccgggctcc ggtggtgcgg ggccctctca ggttgaactc 2940 gcctcttttg cactggaagg ccctcccttt ggcctgagta cttttcccgt tcacgcctca 3000 gtcccgtgga cccagccttt gtcagtggca ggtgcctgaa cagagggtgg atggggggga 3060 taccggaggg ggtcttgtct tcccagccgc agtctaggaa tgatgcgggg gggtggacgc 3120 cttctccata gtctttcccc acctggagca ggggcttcct cagtggtgag gggagctgcc 3180 tacaggttgg accgggaggc agtggcttgg agaggcagct ttccagcctt ggtggggaag 3240 aaagtgtcca ttctttgcct tcctggagct cccagccaga gctgagctta ggcacccgag 3300 tggagcctgc agctgagtct gtgcccgaga caggctgtca gagattccag aagcctctcc 3360 tccccgccgc cctccacccc tgcctttcag cgttgtggat ccctagaggt ggccccctgc 3420 ccgatccacc gtcctgaggc agagtgttga gcctcatacc tgtaccaggt ccccggccag 3480 ctgggcccct cccaggcact gccaggaagc cccagctgcc cctggcgggt gtggtggaaa tggcaggagg gtgcaggtac tcttggggcc ccagcggtgg gagtgcaaaa gacccaacgc 3540

		v 14	034 6735 ****			
caacacctgg	tgccttttgc		934.ST25.tx ¹ cacccatccg	-	cttgggaatg	3600
cccgcggctc	cagaggaaaa	agcccaggga	cggggcctcc	gttgcggggg	gtcggctgct	3660
tcttgggaac	tttgtcgttt	ccggcgctgg	ctggctggct	ggctgtaaag	cactgaagcc	3720
ccccggccgc	caacccctga	aagcagaacc	tggcctccct	ggccacagca	gccttaccca	3780
ccgctctacg	tgtcccgggc	acttcccgca	gccttcccgt	ccctttctca	tcggccttgt	3840
agttgtacag	tgctgttggt	ttgaaaaggt	gatgtgtggg	gagtgcggct	catcactgag	3900
tagagaggta	gaatttctat	ttaaccagac	ctgtagtagt	attaccaatc	cagttcaatt	3960
aaggtgattt	tttgtaatta	ttattatttt	ggtgggacaa	tctttaattt	tctaaagata	4020
gcactaacat	cagctcatta	gccacctgtg	cctgtccccg	ccttggcccg	gctggatgaa	4080
gcggcttccc	cgcagggccc	ccacttccca	gtggctgctt	cctggggacc	cagggcaccc	4140
cggcaccttc	aggcacgctc	ctcagctggt	cacctcccgg	ctttgccgtt	cagatggggc	4200
tcctgaggct	caggagtgaa	gatgccacag	agccgggctc	ccctaggctg	cgtcgggcat	4260
gcttggaagc	tggcctgcca	ggaccttcca	ccctggggcc	tgtgtcagcc	gccggccctc	4320
cgcaccctgg	aagcacacgg	cctctgggaa	ggacagccct	gaccttcggt	tttccgagca	4380
cggtgtttcc	caagaattct	gggctggcgg	cctggtggca	gtgctggaga	tgaccccgag	4440
cccctccccg	tggggcaccc	aggagggccc	tgccggaatg	tgcagcctgt	gggtagtcg g	4500
ctggtgtccc	tgtcgtggag	ctggggtgcg	tgatctggtg	ctcgtccacg	caggtgtgtg	4560
gtgtaaacat	gtatgtgctg	tacagagaga	cgcgtgtgga	gagagccgca	caccagcgcc	4620
acccaggaaa	ggcggagcgg	ttaccagtgt	tttgtgttta	tttttaatca	agacgtttcc	4680
cctgttttcc	tataaatttg	cttcgtgtaa	gcaagtacat	aaggaccctc	ctttggtgaa	4740
atccgggttc	gaatgaatat	ctcaaggcag	gagatgcatc	tattttaaga	tgctttggag	4800
cagacagctt	tagccgttcc	caatccttag	caatgcctta	gctgggacgc	atagctaata	4860
ctttagagag	gatgacagat	ccataaagag	agtaaagata	agagaaaatg	tctaaagcat	4920
ctggaaaggt	aaaaaaaaa	aatctatttt	tgtacaaatg	taattttatc	cctcatgtat	4980
acttggatat	ggcgggggga	gggctgggac	tgtttcgttt	ctgcttctag	agattgaggt	5040
gaaagcttcg	tccgagaaac	gccaggacag	acgatggcag	aggagagggc	tcctgtgacg	5100
gcggcgaggc	ttgggaggaa	accgccgcaa	tgggggtgtc	ttccctcggg	gcaggagggt	5160
gggcctgagg	ctttcaaggg	ttttcttccc	tttcgagtaa	tttttaaagc	cttgctctgt	5220
tgtgtcctgt	tgccggctct	ggccttcctg	tgactgactg	tgaagtggct	tctccgtacg	5280
attgtctctg	aaacatcgtg	gcctcaggtg	ccagggtttg	atggacagta	gcattagaat	5340
tgtggaaaag	gaacacgcaa	agggagaagt	gtgagaggag	aaacaaaata	tgagcgttta	5400
aaatacatcg	ccattcagtt	cgttaaaaaa	aaaaaaaaa	aaaaaaaa		5449

<210> 6 <211> 462 <212> PRT <213> homo sapiens

Met Asp Thr Lys His Phe Leu Pro Leu Asp Phe Ser Thr Gln Val Asn 5 10 15 Ser Ser Leu Thr Ser Pro Thr Gly Arg Gly Ser Met Ala Ala Pro Ser 20 25 30 Leu His Pro Ser Leu Gly Pro Gly Ile Gly Ser Pro Gly Gln Leu His $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$ Ser Pro Ile Ser Thr Leu Ser Ser Pro Ile Asn Gly Met Gly Pro Pro 50 60 Phe Ser Val Ile Ser Ser Pro Met Gly Pro His Ser Met Ser Val Pro 65 70 75 80 Thr Thr Pro Thr Leu Gly Phe Ser Thr Gly Ser Pro Gln Leu Ser Ser 90 95 Pro Met Asn Pro Val Ser Ser Ser Glu Asp Ile Lys Pro Pro Leu Gly 100 105 110 Leu Asn Gly Val Leu Lys Val Pro Ala His Pro Ser Gly Asn Met Ala 115 120 125 Ser Phe Thr Lys His Ile Cys Ala Ile Cys Gly Asp Arg Ser Ser Gly 130 135 140 Lys His Tyr Gly Val Tyr Ser Cys Glu Gly Cys Lys Gly Phe Phe Lys 145 150 155 160 Arg Thr Val Arg Lys Asp Leu Thr Tyr Thr Cys Arg Asp Asn Lys Asp 165 170 175Cys Leu Ile Asp Lys Arg Gln Arg Asn Arg Cys Gln Tyr Cys Arg Tyr 180 185 190 Gln Lys Cys Leu Ala Met Gly Met Lys Arg Glu Ala Val Gln Glu Glu 195 200 205

Arg Gln Arg Gly Lys Asp Arg Asn Glu Asn Glu Val Glu Ser Thr Ser 210 220

X-14934.ST25.txt Ser Ala Asn Glu Asp Met Pro Val Glu Arg Ile Leu Glu Ala Glu Leu 225 230 235 240 Ala Val Glu Pro Lys Thr Glu Thr Tyr Val Glu Ala Asn Met Gly Leu 245 250 255 Asn Pro Ser Ser Pro Asn Asp Pro Val Thr Asn Ile Cys Gln Ala Ala 260 265 270 Asp Lys Gln Leu Phe Thr Leu Val Glu Trp Ala Lys Arg Ile Pro His 275 280 285 Phe Ser Glu Leu Pro Leu Asp Asp Gln Val Ile Leu Leu Arg Ala Gly 290 295 300 Trp Asn Glu Leu Leu Ile Ala Ser Phe Ser His Arg Ser Ile Ala Val 305 310 315 320 Lys Asp Gly Ile Leu Leu Ala Thr Gly Leu His Val His Arg Asn Ser 325 330 335 Ala His Ser Ala Gly Val Gly Ala Ile Phe Asp Arg Val Leu Thr Glu 340 345 350 Leu Val Ser Lys Met Arg Asp Met Gln Met Asp Lys Thr Glu Leu Gly 355 360 365 Cys Leu Arg Ala Ile Val Leu Phe Asn Pro Asp Ser Lys Gly Leu Ser 370 375 380 Asn Pro Ala Glu Val Glu Ala Leu Arg Glu Lys Val Tyr Ala Ser Leu 385 390 395 400 Glu Ala Tyr Cys Lys His Lys Tyr Pro Glu Gln Pro Gly Arg Phe Ala 405 410 415 Lys Leu Leu Arg Leu Pro Ala Leu Arg Ser Ile Gly Leu Lys Cys 420 425 430 Leu Glu His Leu Phe Phe Phe Lys Leu Ile Gly Asp Thr Pro Ile Asp $435 \hspace{1.5cm} 440 \hspace{1.5cm} 445$ Thr Phe Leu Met Glu Met Leu Glu Ala Pro His Gln Met Thr 450 460

<210> 7 <211> 2892 <212> DNA <213> homo sapiens

-100- 7						
<400> 7 caaagatggc	tgccacattg	gcgctgtcat	tttggtactg	agcagagcga	cgggcttaat	60
tcgacccaat	ccaggccaga	gtctttctct	caggggcttc	ctcgtgctca	gctaatcctc	120
cgatcaatcc	ttgggaatcc	ctgggacctc	ttcggtatcc	ctactctcag	ccagggatca	180
tgtcttgggc	cgctcgcccg	cccttcctcc	ctcagcggca	tgccgcaggg	cagtgtgggc	240
cggtgggggt	gcgaaaagaa	atgcattgtg	gggtcgcgtc	ccggtggcgg	cggcgacggc	300
cctggctgga	tcccgcagcg	gcggcggcgg	cggcggtggc	aggcggagaa	caacaaaccc	360
cggagccgga	gccaggggag	gctggacggg	acgggatggg	cgacagcggg	cgggactccc	420
gaagcccaga	cagctcctcc	ccaaatcccc	ttccccaggg	agtccctccc	ccttctcctc	480
ctgggccacc	cctaccccct	tcaacagctc	catcccttgg	aggctctggg	gccccacccc	540
cacccccgat	gccaccaccc	ccactgggct	ctccctttcc	agtcatcagt	tcttccatgg	600
ggtcccctgg	tctgccccct	ccagctcccc	caggattctc	cgggcctgtc	agcagccccc	660
agattaactc	aacagtgtca	ctccctgggg	gtgggtctgg	ccccctgaa	gatgtgaagc	720
caccagtctt	aggggtccgg	ggcctgcact	gtccaccccc	tccaggtggc	cctggggctg	780
gcaaacggct	atgtgcaatc	tgcggggaca	gaagctcagg	caaacactac	ggggtttaca	840
gctgtgaggg	ttgcaagggc	ttcttcaaac	gcaccatccg	caaagacctt	acatactctt	900
gccgggacaa	caaagactgc	acagtggaca	agcgccagcg	gaaccgctgt	cagtactgcc	960
gctatcagaa	gtgcctggcc	actggcatga	agagggaggc	ggtacaggag	gagcgtcagc	1020
ggggaaagga	caaggatggg	gatggggagg	gggctggggg	agcccccgag	gagatgcctg	1080
tggacaggat	cctggaggca	gagcttgctg	tggaacagaa	gagtgaccag	ggcgttgagg	1140
gtcctggggg	aaccgggggt	agcggcagca	gcccaaatga	ccctgtgact	aacatctgtc	1200
aggcagctga	caaacagcta	ttcacgcttg	ttgagtgggc	gaagaggatc	ccacactttt	1260
cctccttgcc	tctggatgat	caggtcatat	tgctgcgggc	aggctggaat	gaactcctca	1320
ttgcctcctt	ctcacaccga	tccattgatg	ttcgagatgg	catcctcctt	gccacaggtc	1380
ttcacgtgca	ccgcaactca	gcccattcag	caggagtagg	agccatcttt	gatcgggtgc	1440
tgacagagct	agtgtccaaa	atgcgtgaca	tgaggatgga	caagacagag	cttggctgcc	1500
tgagggcaat	cattctgttt	aatccagatg	ccaagggcct	ctccaaccct	agtgaggtgg	1560
aggtcctgcg	ggagaaagtg	tatgcatcac	tggagaccta	ctgcaaacag	aagtaccctg	1620
agcagcaggg	acggtttgcc	aagctgctgc	tacgtcttcc	tgccctccgg	tccattggcc	1680
ttaagtgtct	agagcatctg	tttttcttca	agctcattgg	tgacaccccc	atcgacacct	1740
tcctcatgga	gatgcttgag	gctccccatc	aactggcctg	agctcagacc	cagacgtggt	1800
gcttctcaca	ctggaggagc	acacatccaa	gagggactcc	aagccctggg	gcagggtggg	1860

		x-14	934.ST25.tx [.]	r		
gggccatgtt	cccagaacct			_	agaacataaa	1920
ccctccaagg	gatctgcttg	atatcccaag	ttggaaggga	ccccagatac	ctgtgaggac	1980
tggttgtctc	tcttcggtgg	ccttgagtct	ctgaatttgt	cgggttctcc	catgatttgg	2040
ggtgatttct	caccctctgt	ccttccccca	gcacaaagca	ctggccttgc	ctccaggacc	2100
ttgcttcctt	ctcatcttgc	ctcattttgc	ttcccatctg	aagagtggaa	atggggaact	2160
ccccagagg	tggatactgg	ggggcaggcc	tcccaagctg	atggacatga	gagtagggcc	2220
ctgacaggcc	ttcctcctct	caaacctggc	agatgggggc	ctctctggaa	gagggagggg	2280
ccctgtcact	gtccagagtc	tctttttaca	cttcacctcc	ttctgcagtc	agactgaaat	2340
ataaaaaagg	tggtggtggt	ggtgaagggg	ctggtggaga	tgtaggaacc	gatctgctat	2400
ttttaatttc	ctgtgaggat	agagacttgc	agttagactc	aaagaagtac	tgtactttcc	2460
caggttgact	aagaaatgcc	agtggtggag	gtgggtgttt	gggaaaggca	gggccctgaa	2520
atggcctgtc	cctagggctc	tccaagcact	agccttccca	gcttcccgcc	gccccccta	2580
tctcttcctg	tctaacttgg	ggaaggggcc	tgggctgtga	ggacagggcc	cccacagggg	2640
atggtttcac	gagtgtagtc	ccggaggcct	tccctttaca	gctctcctcc	agccctgggc	2700
acatagcata	ggctggggac	acaggatcct	ggcctgagaa	ttgaggggag	gtggccagcc	2760
cgcagaggtg	gggtgctggg	gctgcatgat	ttttgccctg	cgtcccttct	ctttggggct	2820
cctttcccct	ctcatacata	aaatcgcttt	caaattaaaa	tcgctgtttt	ctggaaaaaa	2880
aaaaaaaaa	aa					2892
<210> 8						

<210> 8 <211> 533 <212> PRT <213> homo sapiens

<400>

Met Ser Trp Ala Ala Arg Pro Pro Phe Leu Pro Gln Arg His Ala Ala 1 5 10 15

Gly Gln Cys Gly Pro Val Gly Val Arg Lys Glu Met His Cys Gly Val 20 25 30

Ala Ser Arg Trp Arg Arg Arg Pro Trp Leu Asp Pro Ala Ala Ala 35 40 45

Ala Ala Ala Val Ala Gly Gly Glu Gln Gln Thr Pro Glu Pro Glu 50 60

Pro Gly Glu Ala Gly Arg Asp Gly Met Gly Asp Ser Gly Arg Asp Ser 65 70 75 80

X-14934.ST25.txt

Arg Ser Pro Asp Ser Ser Ser Pro Asn Pro Leu Pro Gln Gly Val Pro
85 90 95 Pro Pro Ser Pro Pro Gly Pro Pro Leu Pro Pro Ser Thr Ala Pro Ser 100 105 110 Leu Gly Gly Ser Gly Ala Pro Pro Pro Pro Pro Met Pro Pro Pro 115 120 125 Leu Gly Ser Pro Phe Pro Val Ile Ser Ser Ser Met Gly Ser Pro Gly 130 135 140 Leu Pro Pro Ala Pro Pro Gly Phe Ser Gly Pro Val Ser Ser Pro 145 150 155 160 Gln Ile Asn Ser Thr Val Ser Leu Pro Gly Gly Gly Ser Gly Pro Pro 165 170 175 Glu Asp Val Lys Pro Pro Val Leu Gly Val Arg Gly Leu His Cys Pro 180 185 190 Pro Pro Gly Gly Pro Gly Ala Gly Lys Arg Leu Cys Ala Ile Cys 195 200 205 Gly Asp Arg Ser Ser Gly Lys His Tyr Gly Val Tyr Ser Cys Glu Gly 210 220 Cys Lys Gly Phe Phe Lys Arg Thr Ile Arg Lys Asp Leu Thr Tyr Ser 225 230 235 240 Cys Arg Asp Asn Lys Asp Cys Thr Val Asp Lys Arg Gln Arg Asn Arg 245 250 255 Cys Gln Tyr Cys Arg Tyr Gln Lys Cys Leu Ala Thr Gly Met Lys Arg 260 265 270 Glu Ala Val Gln Glu Glu Arg Gln Arg Gly Lys Asp Lys Asp Gly Asp 275 280 285 Gly Glu Gly Ala Gly Gly Ala Pro Glu Glu Met Pro Val Asp Arg Ile 290 295 300 Leu Glu Ala Glu Leu Ala Val Glu Gln Lys Ser Asp Gln Gly Val Glu 305 310 315 320 Gly Pro Gly Gly Thr Gly Gly Ser Gly Ser Ser Pro Asn Asp Pro Val 325 330 335

Thr	Asn	Ile	Cys 340	Gln	Ala	Ala				5.txi Leu		Thr	Leu 350	val	Glu
Trp	Ala	Lys. 355	Arg	Ile	Pro	His	Phe 360	Ser	Ser	Leu	Pro	Leu 365	Asp	Asp	Gln
val	11e 370	Leu	Leu	Arg	Ala	Gly 375	Trp	Asn	Glu	Leu	Leu 380	Ile	Ala	Ser	Phe
Ser 385	His	Arg	Ser	Ile	Asp 390	val	Arg	Asp	Gly	Ile 395	Leu	Leu	Ala	Thr	Gly 400
Leu	His	Val	His	Arg 405	Asn	Ser	Ala	His	Ser 410	Ala	Gly	∨al	Gly	Ala 415	Ile
Phe	Asp	Arg	va1 420	Leu	Thr	Glu	Leu	va1 425	Ser	Lys	Met	Arg	Asp 430	Met	Arg
Met	Asp	Lys 435	Thr	Glu	Leu	Gly	Cys 440	Leu	Arg	Ala	Ile	Ile 445	Leu	Phe	Asn
Pro	Asp 450	Ala	Lys	Gly	Leu	Ser 455	Asn	Pro	Ser	Glu	va1 460	Glu	val	Leu	Arg
Glu 465	Lys	val-	Tyr	Ala	Ser 470	Leu	Glu	Thr	Tyr	Cys 475	Lys	Gln	Lys	Tyr	Pro 480
Glu	Gln	Gln	Gly	Arg 485	Phe	Ala	Lys	Leu	Leu 490	Leu	Arg	Leu	Pro	Ala 495	Leu
Arg	Ser	Ile	Gly 500	Leu	Lys	Cys	Leu	Glu 505	нis	Leu	Phe	Phe	Phe 510	Lys	Leu
Ile	Gly	Asp 515	Thr	Pro	Ile	Asp	Thr 520	Phe	Leu	Met	Glu	Met 525	Leu	Glu	Ala
Pro	ніs 530	Gln	Leu	Ala											
<210 <211 <212 <213	L> : 2> i	9 1742 DNA homo	sap ⁻	iens							·				·

60 120

180

<400> 9 ctccgatcta gaggcagatt cctgactaat cccagagggc tggcccagcc tgtgctcccc

gggctgctag gaagcgatga ccactcttgt tagcccaagt tgaagaaagc cgggctgtgc ctgggagccg agagaggcgg taatatttag aagctgcaca ggagaggaac atgaactgac

gagtaaacat gtatggaaat		934.ST25.tx [.] tcatgaagtt		tatggaggct	240
cccctggcca cactggctct	acatccatga	gcccatcagc	agccttgtcc	acagggaagc	300
caatggacag ccaccccagc	tacacagata	ccccagtgag	tgccccacgg	actctgagtg	360
cagtggggac cccctcaat	gccctgggct	ctccatatcg	agtcatcacc	tctgccatgg	420
gcccaccctc aggagcactt	gcagcgcctc	caggaatcaa	cttggttgcc	ccacccagct	480
ctcagctaaa tgtggtcaac	agtgtcagca	gttcagagga	catcaagccc	ttaccagggc	540
ttcccgggat tggaaacatg	aactacccat	ccaccagccc	cggatctctg	gttaaacaca	600
tctgtgccat ctgtggagac	agatcctcag	gaaagcacta	cggggtatac	agttgtgaag	660
gctgcaaagg gttcttcaag	aggacgataa	ggaaggacct	catctacacg	tgtcgggata	720
ataaagactg cctcattgac	aagcgtcagc	gcaaccgctg	ccagtactgt	cgctatcaga	780
agtgccttgt catgggcatg	aagagggaag	ctgtgcaaga	agaaagacag	aggagccgag	840
agcgagctga gagtgaggca	gaatgtgcta	ccagtggtca	tgaagacatg	cctgtggaga	900
ggattctaga agctgaactt	gctgttgaac	caaagacaga	atcctatggt	gacatgaata	960
tggagaactc gacaaatgac	cctgttacca	acatatgtca	tgctgctgac	aagcagcttt	1020
tcaccctcgt tgaatgggcc	aagcgtattc	cccacttctc	tgacctcacc	ttggaggacc	1080
aggtcatttt gcttcgggca	gggtggaatg	aattgctgat	tgcctctttc	tcccaccgct	1140
cagtttccgt gcaggatggc	atccttctgg	ccacgggttt	acatgtccac	cggagcagtg	1200
cccacagtgc tggggtcggc	tccatctttg	acagagtcct	aactgagctg	gtttccaaaa	1260
tgaaagacat gcagatggac	aagtcggaac	tgggatgcct	gcgagccatt	gtactcttta	1320
acccagatgc caagggcctg	tccaacccct	ctgaggtgga	gactctgcga	gagaaggttt	1380
atgccaccct tgaggcctac	accaagcaga	agtatccgga	acagccaggc	aggtttgcca	1440
agctgctgct gcgcctccca	gctctgcgtt	ccattggctt	gaaatgcctg	gagcacctct	1500
tcttcttcaa gctcatcggg	gacaccccca	ttgacacctt	cctcatggag	atgttggaga	1560
ccccgctgca gatcacctga	gccccaccag	ccacagcctc	cccacccagg	atgacccctg	1620
ggcaggtgtg tgtggacccc	caccctgcac	tttcctccac	ctcccaccct	gacccccttc	1680
ctgtccccaa aatgtgatgc	ttataataaa	gaaaaccttt	ctacaaaaaa	aaaaaaaaa	1740
aa					1742

<210> 10 <211> 463 <212> PRT <213> homo sapiens

<400> 10

Met Tyr Gly Asn Tyr Ser His Phe Met Lys Phe Pro Ala Gly Tyr Gly $10 \ 15$

Gly Ser Pro Gly His Thr Gly Ser Thr Ser Met Ser Pro Ser Ala Ala 20 25 30 Leu Ser Thr Gly Lys Pro Met Asp Ser His Pro Ser Tyr Thr Asp Thr 35 40 45Pro Val Ser Ala Pro Arg Thr Leu Ser Ala Val Gly Thr Pro Leu Asn 50 60 Ala Leu Gly Ser Pro Tyr Arg Val Ile Thr Ser Ala Met Gly Pro Pro 65 70 75 80 Ser Gly Ala Leu Ala Ala Pro Pro Gly Ile Asn Leu Val Ala Pro Pro 85 90 95 Ser Ser Gln Leu Asn Val Val Asn Ser Val Ser Ser Ser Glu Asp Ile 100 105 110Lys Pro Leu Pro Gly Leu Pro Gly Ile Gly Asn Met Asn Tyr Pro Ser 115 120 125 Thr Ser Pro Gly Ser Leu Val Lys His Ile Cys Ala Ile Cys Gly Asp 130 135 140 Arg Ser Ser Gly Lys His Tyr Gly Val Tyr Ser Cys Glu Gly Cys Lys 145 150 155 160 Gly Phe Phe Lys Arg Thr Ile Arg Lys Asp Leu Ile Tyr Thr Cys Arg 165 170 175 Asp Asn Lys Asp Cys Leu Ile Asp Lys Arg Gln Arg Asn Arg Cys Gln 180 185 190 Tyr Cys Arg Tyr Gln Lys Cys Leu Val Met Gly Met Lys Arg Glu Ala 195 200 205 Val Gln Glu Glu Arg Gln Arg Ser Arg Glu Arg Ala Glu Ser Glu Ala 210 215 220 Glu Cys Ala Thr Ser Gly His Glu Asp Met Pro Val Glu Arg Ile Leu 225 230 240 Glu Ala Glu Leu Ala Val Glu Pro Lys Thr Glu Ser Tyr Gly Asp Met 245 250 255 Asn Met Glu Asn Ser Thr Asn Asp Pro Val Thr Asn Ile Cys His Ala 260 265 270 Page 17

Ala Asp Lys Gln Leu Phe Thr Leu Val Glu Trp Ala Lys Arg Ile Pro 275 280 285 His Phe Ser Asp Leu Thr Leu Glu Asp Gln Val Ile Leu Leu Arg Ala 290 295 300 Gly Trp Asn Glu Leu Leu Ile Ala Ser Phe Ser His Arg Ser Val Ser 305 310 315 320Val Gln Asp Gly Ile Leu Leu Ala Thr Gly Leu His Val His Arg Ser 325 330 335 Ser Ala His Ser Ala Gly Val Gly Ser Ile Phe Asp Arg Val Leu Thr 340 345 350 Glu Leu Val Ser Lys Met Lys Asp Met Gln Met Asp Lys Ser Glu Leu $355 \hspace{1.5cm} 360 \hspace{1.5cm} 365$ Gly Cys Leu Arg Ala Ile Val Leu Phe Asn Pro Asp Ala Lys Gly Leu 370 380 Ser Asn Pro Ser Glu Val Glu Thr Leu Arg Glu Lys Val Tyr Ala Thr 385 390 395 400 Leu Glu Ala Tyr Thr Lys Gln Lys Tyr Pro Glu Gln Pro Gly Arg Phe 405 410 415 Ala Lys Leu Leu Leu Arg Leu Pro Ala Leu Arg Ser Ile Gly Leu Lys 420 425 430 Cys Leu Glu His Leu Phe Phe Phe Lys Leu Ile Gly Asp Thr Pro Ile 435 440 445 Asp Thr Phe Leu Met Glu Met Leu Glu Thr Pro Leu Gln Ile Thr 450 455 460